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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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BANNER & WITCOFF, LTD.
1001 G STREET, N.W.
WASHINGTON, DC 20001-4597

EXAMINER	
PREVIL, DANIEL	

ART UNIT	PAPER NUMBER
2636	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/904,419	KAUFFMAN, SCOTT	
	Examiner	Art Unit	
	Daniel Previl	2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-67* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-67* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/22/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to communication filed on July 12, 2005.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 8-10, 12-18, 24-26, 28-35, 41-43, 45-52, 58-60, 62-67, are rejected under 35 U.S.C. 102(b) as being anticipated by Merton Wilcox (US 3,588,806).

Regarding claim 1, Wilcox discloses an apparatus for activating an inductance loop vehicle detector (abstract) comprising: a magnet (coil 20 in the high frequency source 2) (fig. 1, ref. 2; fig. 3, ref. 20); a mount for attaching the magnet to a vehicle at a position that will cause the magnet to activate an inductance loop vehicle detector when the vehicle moves proximal to an inductance loop of the inductance loop vehicle detector (if the arriving vehicle carries a properly tuned high frequency source 2, detector 4 or 5 will energize into a condition to cause a suitable indicator such as pilot light 18 to be on) (col. 2, lines 71-75; col. 3, lines 1-5).

Regarding claim 2, Wilcox discloses an automobile (col. 1, lines 37-44).

Regarding claims 8, 24, 41, 58, Wilcox discloses the magnet is an electromagnet (electromagnetic from coil 20) (col. 4, line 47).

Regarding claims 9, 25, 42, 59, Wilcox discloses magnet 20 includes a protective coating (epoxy resin) (fig. 3; col. 4, lines 17-18).

Regarding claims 10, 26, 43, 60, Wilcox discloses a conducting material (conductive metal) (col. 3, line 42).

Regarding claims 12, 28, 45, 62, Wilcox discloses the coating is a non-conductive material (epoxy resin) col. 4, lines 18-19).

Regarding claims 13, 29, 46, 63, Wilcox discloses the coating is formed from plastic or rubber (epoxy resin) (col. 4, lines 18-19).

Regarding claims 14, 31, 48, 65, Wilcox discloses the mount is selected from brackets (col. 3, lines 67-72).

Regarding claims 15, 32, 49, 66, Wilcox discloses the mount includes a member having an adhesive coating on two opposing surfaces (fig. 3; col. 3, lines 62-66; col. 4, lines 18-19).

Regarding claims 16, 33, 50, 67, Wilcox discloses the mount includes a corrugated tie (epoxy resin) (fig. 3; col. 4, lines 18-19).

Regarding claims 17, 34, 51, Wilcox discloses the mount is integrally formed with the vehicle (fig. 1).

Regarding claim 18, Wilcox discloses the step of activating an inductance loop vehicle detector (abstract) comprising: attaching a magnet (coil 20 in the high frequency source 2) (fig. 1, ref. 2; fig. 3, ref. 20) to a vehicle at a position on the vehicle that will cause the magnet to activate an inductance loop vehicle detector when the vehicle moves proximal to

an inductance loop of the inductance vehicle detector (col. 2, lines 71-75; col. 3, lines 1-5); moving the vehicle with the magnet to an inductance loop of the inductance loop vehicle detector (col. 2, lines 71-74).

Regarding claims 30, 47, 64, Wilcox discloses the magnet is attached using a mount (fig. 1, fig. 3).

Regarding claim 35, Wilcox discloses the step of manufacturing a vehicle (fig. 1); attaching a magnet to a vehicle at a position that will cause the magnet to activate an inductance loop vehicle detector when the vehicle moves proximal to an inductance loop of the inductance loop vehicle detector for purposes of activating proximal inductance loop detectors (fig. 1; fig. 3; col. 2, lines 71-75, col. 3, lines 1-5).

Regarding claim 52, Wilcox discloses a method of retrofitting a vehicle (fig. 1) comprising: attaching a magnet to a vehicle at a position on the vehicle that will cause the magnet to activate an inductance loop vehicle detector when the vehicle moves proximal to an inductance loop of the inductance loop vehicle detector (fig. 1; fig. 3; col. 2, lines 71-75; col. 3, lines 1-5).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3-4, 11, 19-20, 27, 36-37, 44, 53-54, 61, are rejected under 35 U.S.C. 103(a) as being unpatentable over Merton Wilcox (US 3,588,806) in view of King (US 4,038,633).

Regarding claims 4, 20, 37, 54, Wilcox discloses all the limitations in claim 1 but fails to explicitly disclose a neodymium-iron-boron magnet.

However, King discloses a neodymium-iron-boron magnet (laminated ferromagnetic core 26) (col. 4, lines 33-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made incorporate the teaching of King in Wilcox. Doing so would have provided the system with the capability of detecting accurately the presence of motor vehicle for use in controlling traffic with a very low installation cost wherein users can save money for economical purposes as taught by King (col. 1, lines 13-15).

Regarding claims 11, 27, 44, 61, Wilcox discloses all the limitations in claim 9 but fails to explicitly disclose a tin, nickel or chrome.

However, King discloses tin, nickel or chrome (ferromagnetic core 26) (col. 4, lines 33-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of king in Wilcox. Doing so would have provided the system with the capability of reducing corrosion in the harsh environment of an automobile in order to

detect accurately the presence of motor vehicles for use in controlling traffic as taught by King (col. 1, lines 11-15).

Regarding claims 3, 19, 36, 53, the examiner takes the official notice that "a permanent magnet" is well-known in the art.

5. Claims 5-7, 21-23, 38-40, 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcox (US 3,588,806).

Regarding claims 5, 21, 38, 55, Wilcox discloses all the limitations in claim 1 but fails to specify that the magnet is a grade 5 ceramic magnet. Since, Wilcox discloses a tank coil (abstract). It is well known in the art to select the magnet from a grade 5 ceramic magnet in order to easily detect the presence of a vehicle. So it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the magnet from a grade 5 ceramic magnet in order to easily detect the presence of a vehicle, thereby preventing accidents from happening.

Regarding claims 6, 22, 39, 56, the above combination discloses all the limitations in claim 1 but fails to specify that the magnet has a total flux of at least 20,000 maxwells and a maximum energy product of at least 6.5 MGO_e. Since, Wilcox discloses a tank coil (abstract)). It is well known in the art for the magnet to have a total flux of at least 20,000 maxwells and a maximum energy product of at least 6.5 MGO_e in order to easily detect the presence of a vehicle. So it would have been obvious to one of ordinary skill in the art at the time the invention was

made to have a total flux of at least 20,000 maxwells and a maximum energy product of at least 6.5 MGO_e in order to easily detect the presence of a vehicle, thereby preventing accidents from happening.

Regarding claims 7, 23, 40, 57, the above combination discloses all the limitations in claim 1 but fails to specify a residual induction of at least 3000 gauss, and a coercive force of at least 2200 oersteds. Since, Wilcox discloses an electromagnet 20 (col. 4, line 47). It is well known in the art for the magnet to have a residual induction of at least 3000 gauss, and a coercive force of at least 2200 oersteds in order to easily detect the presence of a vehicle. So it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a residual induction of at least 3000 gauss, and a coercive force of at least 2200 oersteds in order to easily detect the presence of a vehicle, thereby preventing accidents from happening.

Response to Arguments

6. Applicant's arguments filed on July 12, 2005 have been fully considered but they are not persuasive.

According to Applicant's argument "Wilcox does not disclose a magnet". The examiner respectfully disagrees because Wilcox clearly discloses an electromagnet (col. 4, line 47).

According to Applicant's argument "Wilcox does not teach or suggest the presence of a magnet to trigger a vehicle detector". The examiner strongly

disagrees with the Applicant because Wilcox discloses a coil 20 which is an electromagnet located inside the frequency source 2 that can activate loop coil 5 buried in the pavement 6 of the vehicle pathway (col. 2, lines 47-51 and lines 67-75; col. 3, lines 1-5).

In addition, the examiner urges the Applicant to read Broxmeyer (US 4,965,583) in col. 10, lines 15-31. Broxmeyer has a magnet 13 that mounts under the vehicle 6, the magnet 13 activates the presence detectors and the presence detectors activate the loop antenna (fig. 5; col. 10, lines 15-31). Broxmeyer goes one step further than the Applicant's invention wherein in the Applicant's invention a magnet activates the inductance loop vehicle detector.

For at least the above reason, the rejection of claims 1-67 is sustained.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lees (US 6,345,228) discloses a road vehicle sensing apparatus and signal processing apparatus therefore.

Riesenberg et al. (US 3,949,252) discloses a vehicle wheel rotation speed measuring system.

Prohaska (US 5,201,111) discloses a method of manufacturing an electric motor.

Gebert et al. (US 5,396,234) discloses a validation checking in traffic monitoring equipment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Previl whose telephone number is (571) 272-2971. The examiner can normally be reached on Monday-Thursday. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (571) 272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Previl
Examiner
Art Unit 2636

DP
September 30, 2005.

JEFFERY HOFSASS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600